

MODIFICATION INSTRUCTIONS

Modification No. 2 for the
Kodak X-Omat M43 PROCESSOR, Service Code: 3255
Kodak X-Omat M43A PROCESSOR, Service Code: 3229
Kodak X-Omat Clinic 1 PROCESSOR, Service Code: 3406
Type 2 Selective

Purpose: To reduce the potential of biological growth in the wash system, a Continuous Water On Mode feature has been developed.

Service Effects: None

Special Requirements: For the Anti-Biological Growth Upgrade Kit to work, Modification No. 1 must be installed.

Serial Numbers: Modification No. 2 is already included in PROCESSORS starting with the following serial numbers:
M43A: 466 and above
M43: 525 and above
Clinic 1: 534 and above

Installation Time: Approximately 1 hour

Special Tools: PROM EXTRACTION TOOL TL-4430

Parts Status: Available through Service Parts Management 8/1/95

Parts Requirements: See Parts List on page 2



HEALTH SCIENCES DIVISION

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Caution

Possible damage from electrostatic discharge.



Important

Use qualified service personnel to install this modification.

Parts List: Modification Kit 2 Part No. 8B6930

Part No.	Description	Quantity
963230	UPPER WASH TUBE	1
963231	LOWER WASH TUBE	1
8B6925	CLINIC 1 SOFTWARE 1.90	1
8B6926	M43 and M43A SOFTWARE 1.90	1
8B6948	WASH STEM ASSEMBLY with ORIFICE	1
8B6928	INSTALLATION INSTRUCTIONS	1
650656	1/2 in. OD TUBING, 6 feet	1

Cleaning the Wash System



Caution

Follow these directions carefully to prevent draining the WASH PUMP completely and doing damage.

[1] Remove:

- FEED TRAY
- TOP COVER
- DRIVE ACCESS PANEL
- DRYER RACK
- WASH RACK
- 3 KNOBS from the original DRAIN VALVES and the DRYER TEMPERATURE ADJUSTMENT KNOB
- FRONT PANEL

[2] De-energize the PROCESSOR.

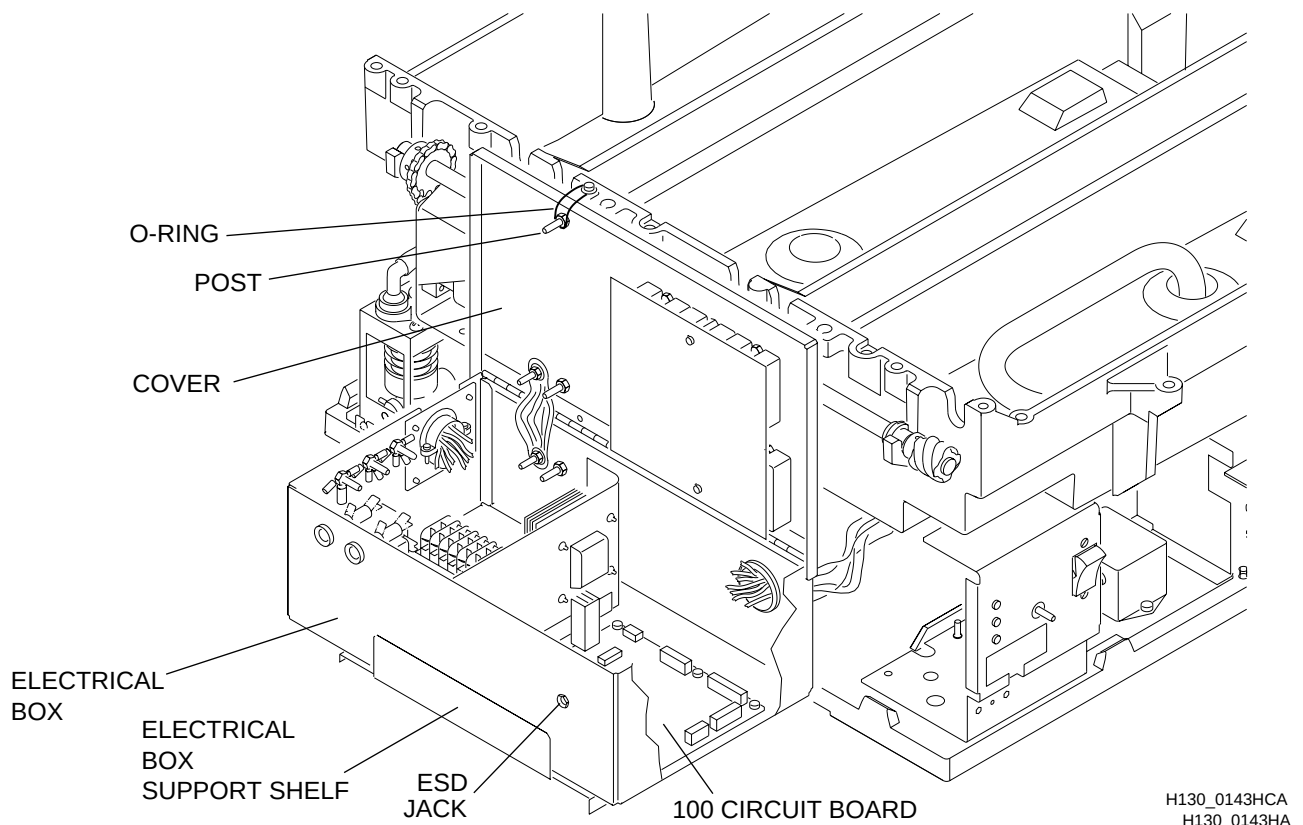
[3] Drain the WASH TANK and remove all debris.

[4] Close the WASH DRAIN VALVE.

[5] Remove bacterial growth in the wash system:

- (a) Make a mild solution of 60 mL (2 fl. oz.) of bleach to 3.8 L (1 gal.) of water. A wash system volume of 5.5 L (1.5 gal.) needs 88 mL (3 fl. oz.) of bleach.
- (b) Fill the TANK with the solution.

Figure 1 **Pulling Out the Electrical Box**





Caution

Possible damage from electrostatic discharge. Wear an ESD protective wrist strap.

- [6] Pull out the SUPPORT SHELF for the ELECTRICAL BOX from the drive side of the PROCESSOR.
- [7] Pull out the ELECTRICAL BOX.
- [8] Connect your ESD protective wrist strap to the JACK on the ELECTRICAL BOX.
- [9] Open the COVER of the ELECTRICAL BOX. Fasten the COVER open by placing the O-RING on the PROCESSOR TANK around the POST on the COVER of the ELECTRICAL BOX.
- [10] Set the SWITCH positions for service routines to operate the WASH RECIRCULATION PUMP and WASH DIVERTER SOLENOID L3 of the DIVERTER VALVE ASSEMBLY.
 - Set SWITCHES 1 and 3 to On.
 - SWITCHES 2, 4, and 5 remain Off.
- [11] Close the ELECTRICAL BOX COVER.
- [12] Energize the PROCESSOR for 10 - 15 sec. Allow the cleaning solution to circulate.
- [13] De-energize the PROCESSOR.



Important

For the M43 and M43A PROCESSORS only, do Steps 14 through 18. For the Clinic 1 PROCESSOR, go to Step 18.



Caution

Possible damage from electrostatic discharge. Wear an ESD protective wrist strap.

- [14] Set the SWITCH positions for service routines to operate the WASH RECIRCULATION PUMP and DEVELOPER COOLING SOLENOID L2 of the DIVERTER VALVE ASSEMBLY.
 - Set SWITCHES 1 and 5 to On.
 - SWITCHES 2, 3, and 4 remain Off.
- [15] Close the ELECTRICAL BOX COVER.
- [16] Energize the PROCESSOR for 10 - 15 sec. Allow the cleaning solution to circulate.
- [17] De-energize the PROCESSOR.
- [18] Allow the solution to remain in the system for 20 - 30 min.

Removing the Cleaning Solution



Caution

Possible damage from electrostatic discharge. Wear an ESD protective strap.



Important

Do the following steps to prevent contamination of the wash system, which can do damage to film quality.

- [19] Set the SWITCH positions for service routines to operate the WASH RECIRCULATION PUMP and WASH DIVERTER SOLENOID L3 of the DIVERTER VALVE ASSEMBLY.
 - Set SWITCHES 1 and 3 to On.
 - SWITCHES 2, 4, and 5 remain Off.
- [20] Close the ELECTRICAL BOX COVER.
- [21] Insert an end of the ½ in. OD TUBING into the wash recirculation OUTLET located where the wash water enters the WASH RACK.

[22] Insert the other end of the ½ in. OD TUBING into a 5 gal. container.



Caution

Operating the WASH RECIRCULATION PUMP without water in the WASH TANK can damage the PUMP. Therefore, to prevent damage to the PUMP, do not energize the PROCESSOR for more than 15 sec.

[23] Open the WASH DRAIN VALVE.

[24] Energize the PROCESSOR for 10 - 15 sec.

[25] Allow the WASH TANK to drain completely.

[26] Use a cloth and water to clean the WASH TANK.

[27] Close the DRAIN VALVE.

[28] Fill the WASH TANK with clean water.

[29] Do Steps 23 - 28 at least 3 more times.



Important

For the M43 and M43A PROCESSORS only, do Steps 30 through 33. For the Clinic 1 PROCESSOR, go to Step 34.



Caution

Possible damage from electrostatic discharge. Wear an ESD protective strap.

[30] For the M43A and M43A PROCESSORS, set the SWITCH positions for service routines to operate the WASH RECIRCULATION PUMP and DEVELOPER COOLING SOLENOID L2 of the DIVERter VALVE ASSEMBLY.

- Set SWITCHES 1 and 5 to On.
- SWITCHES 2, 3, and 4 remain Off.

[31] Close the ELECTRICAL BOX COVER.

[32] Do Steps 21 - 28 at least 3 more times.

[33] Set all SWITCHES to Off.

[34] Install the Anti-Biological Growth Upgrade Kit.

Installing the Anti-Biological Growth Upgrade Kit



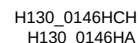
Caution

Check that the WASH TANK is drained before removing the WASH CAP.

[35] Loosen the WASH CAP.

[36] Remove the WASH CAP and the STEM.

[37] Install the WASH STEM ASSEMBLY with ORIFICE 8B6948.



Possible damage from electrostatic discharge.

Wear an ESD protective wrist strap.

[38] Change the settings on JUMPER E4 on the 100 CIRCUIT BOARD from positions 2 and 3 to positions 1 and 2.

JUMPER Position	Mode	Initial Start-Up Characteristics
1 - 2	Continuous Water On	Water Runs Continuously
2 - 3	Water Conservation	Wash Water Stops Running After 8 mins.



Before you install the new SOFTWARE PROM U5, take note of the correct orientation of the original SOFTWARE PROM U5.

[39] Using the PROM EXTRACTION TOOL TL-4430, remove the SOFTWARE PROM U5 from the 100 CIRCUIT BOARD.



Caution

The SOFTWARE PROMS are not interchangeable. Do not attempt to upgrade the Clinic 1 PROCESSOR by installing the M43 SOFTWARE PROM. Installing an M43A SOFTWARE PROM into a Clinic 1 PROCESSOR will not improve the performance of the Clinic 1 PROCESSOR. The M43A SOFTWARE PROM cannot support the hardware differences in a Clinic 1 PROCESSOR.

[40] Select the correct SOFTWARE PROM U5 provided for your PROCESSOR MODEL.

PROCESSOR	Part No. for PROM U5
X-Omat M43/M43A	8B6926
X-Omat Clinic 1	8B6925



Note

Check that the orientation of the SOFTWARE PROM U5 is in the correct position as shown in the Figure 2.

[41] Carefully press the new SOFTWARE PROM U5 into the SOCKET.

[42] Close the COVER of the ELECTRICAL BOX.

[43] Disconnect your ESD protective wrist strap from the JACK on the ELECTRICAL BOX.

[44] Move the ELECTRICAL BOX and the SUPPORT SHELF to the original positions.

[45] Circle "2" on the MODIFICATION LABEL on the TANK WALL above the ELECTRICAL BOX.

[46] Install:

- new WASH TUBES correctly into the WASH RACK
- WASH RACK
- DRYER RACK
- DRIVE ACCESS PANEL
- FRONT PANEL
- TOP COVER
- FEED TRAY

[47] Check that the new DRAIN VALVE with the ORIFICE is in the closed position.



Note

The closed position allows approximately ¼ litre of wash water per minute to drain.

[48] Install the original DRAIN VALVE KNOBS and the DRYER KNOB.

[49] Before energizing the PROCESSOR, verify that the JUMPER position is set to 1 and 2 as shown in Step 38.



Note

When the PROCESSOR is de-energized, the WASH TANK drains completely overnight.

[50] Check for the correct operation of the PROCESSOR.

Publication History

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